Petriman, Viorica

From: Ruvo, Richard
Sent: Monday, July 28, 2014 12:04 PM
To: Riva, Steven
Subject: RE: Greenidge DRAFT LETTER

[redacted] Ex. 5: Attorney -Client/Deliberative

From: Riva, Steven
Sent: Monday, July 28, 2014 10:11 AM
To: Ruvo, Richard
Subject: FW: Greenidge DRAFT LETTER

From: Petriman, Viorica
Sent: Monday, July 28, 2014 9:51 AM
To: Riva, Steven; Siegel, Joseph
Subject: Greenidge DRAFT LETTER

Steve/Joe:

Here is the (first) draft letter on the Reactivation of Greenidge for your review and input.

Thanks, Viorica

[redacted]

Ex. 5: Attorney -Client/Deliberative

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

Ex. 5: Attorney -Client/Deliberative

[redacted]

- [redacted]
- [redacted]

[redacted]

o [redacted]

[redacted]

Ex. 5: Attorney -Client/Deliberative

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

Ex. 5: Attorney -Client/Deliberative

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

Ex. 5: Attorney -Client/Deliberative

[redacted]

[redacted]

[redacted]

- [redacted]

Ex. 5: Attorney -Client/Deliberative

Emissions - Unit Level Data Report
Jul 24, 2014

Your query will return 1 Facility(s) and 3 Unit(s)

Program: All Programs

Data Set: Emissions - Unit Level Data

Time Frame: Emissions :
Annual : 2007
Facility Attributes : 2014, 2013, 2012, 2011, 2010, 2009, 2008, 2007, 2006, 2005, 2004, 2003, 2002, 2001, 2000, 1999, 1998, 1997, 1996, 1995, 1990, 1985, 1980

Criteria: Facility Name/ID : Greenidge Generation LLC

Aggregate Criteria: No Aggregation (Unit Level)

Columns: State, Facility Name, Facility ID (ORISPL), Unit ID, Year, Operating Time, # of Months Reported

Record Number	State	Facility Name	Facility ID (ORISPL)	Unit ID	Year	Operating Time	# of Months Reported
1	NY	Greenidge Generation LLC	2527	4	2007	1,141	12
2	NY	Greenidge Generation LLC	2527	5	2007	1,152	12
3	NY	Greenidge Generation LLC	2527	6	2007	7,878	12

Columns: Gross Load (MW-h), Steam Load (1000lb), SO2 (tons), Avg. NOx Rate (lb/MMBtu), NOx (tons), CO2 (short tons), Heat Input (MMBtu)

Record Number	Gross Load (MW-h)	Steam Load (1000lb)	SO2 (tons)	Avg. NOx Rate (lb/MMBtu)	NOx (tons)	CO2 (short tons)	Heat Input (MMBtu)
1		243,626	398.4	0.65	90.3	27,984.4	272,758
2		225,202	351.3	0.65	82.1	25,605	249,568
3	713,361		2,332.5	0.2	673.8	726,877.6	7,082,666

ENCLOSURE 1

Columns: EPA Region, County, Owner, Operator, SO2 Phase, NOx Phase, Operating Status

Record Number	EPA Region	County	Owner	Operator	SO2 Phase	NOx Phase	Operating Status
1	2	Yates	AEE 2, LLC	AES Corporation	Phase 2	Phase II Group 1	Operating
2	2	Yates	AES Corporation	AES Corporation	Phase 2	Phase II Group 1	Operating
3	2	Yates	AEE 2, LLC	AES Corporation	Table 1	Phase 1 Group 1	Operating

Columns: Unit Type, Fuel Type (Primary), Fuel Type (Secondary), SO2 Control(s), NOx Control(s), PM Control(s)

Record Number	Unit Type	Fuel Type (Primary)	Fuel Type (Secondary)	SO2 Control(s)	NOx Control(s)	PM Control(s)
1	Dry bottom wall-fired boiler	Coal	Residual Oil			Electrostatic Precipitator
2	Dry bottom wall-fired boiler	Coal	Residual Oil			Electrostatic Precipitator
3	Tangentially-fired	Coal	Residual Oil	Dry Lime FGD (Began May 29, 2007)	Low NOx Burner Technology w/ Closed-coupled OFA (Began May 29, 2007) Selective Catalytic Reduction (Began May 29, 2007)	Electrostatic Precipitator Baghouse (Began May 29, 2007)

Emissions - Unit Level Data Report
Jul 24, 2014

Your query will return 1 Facility(s) and 3 Unit(s)

Program: Acid Rain Program (ARP)

Data Set: Emissions - Unit Level Data

Time Frame: Emissions :
Annual : 2008

Criteria: Facility Name/ID : Greenidge Generation LLC

Aggregate Criteria: No Aggregation (Unit Level)

Columns: State, Facility Name, Facility ID (ORISPL), Unit ID, Associated Stacks, Year, Program(s)

Record Number	State	Facility Name	Facility ID (ORISPL)	Unit ID	Associated Stacks	Year	Program(s)
1	NY	Greenidge Generation LLC	2527	4	CSG003	2008	ARP
2	NY	Greenidge Generation LLC	2527	5	CSG003	2008	ARP
3	NY	Greenidge Generation LLC	2527	6		2008	ARP

Columns: SO2 (tons), Avg. NOx Rate (lb/MMBtu), NOx (tons), CO2 (short tons), Heat Input (MMBtu), Operating Time, # of Months Reported

Record Number	SO2 (tons)	Avg. NOx Rate (lb/MMBtu)	NOx (tons)	CO2 (short tons)	Heat Input (MMBtu)	Operating Time	# of Months Reported
1	177	0.58	37.6	12,798	124,713	1,139	12
2	200.9	0.58	43.6	14,887	145,073	1,307	12
3	447.9	0.17	539.3	688,271.2	6,707,595	8,447	12

ENCLOSURE 1

Columns: Gross Load (MW-h), Steam Load (1000lb), EPA Region, County, Source Category, Owner, Operator

Record Number	Gross Load (MW-h)	Steam Load (1000lb)	EPA Region	County	Source Category	Owner	Operator
1		175,755	2	Yates	Electric Utility	AES Corporation	AES Corporation
2		206,479	2	Yates	Electric Utility	AES Corporation	AES Corporation
3	731,082		2	Yates	Electric Utility	AES Corporation	AES Corporation

Columns: SO2 Phase, NOx Phase, Operating Status, Unit Type, Fuel Type (Primary), Fuel Type (Secondary), SO2 Control(s)

Record Number	SO2 Phase	NOx Phase	Operating Status	Unit Type	Fuel Type (Primary)	Fuel Type (Secondary)	SO2 Control(s)
1	Phase 2	Phase II Group 1	Operating	Dry bottom wall-fired boiler	Coal	Residual Oil	
2	Phase 2	Phase II Group 1	Operating	Dry bottom wall-fired boiler	Coal	Residual Oil	
3	Table 1	Phase 1 Group 1	Operating	Tangentially-fired	Coal	Residual Oil	Dry Lime FGD

Columns: NOx Control(s), PM Control(s)

Record Number	NOx Control(s)	PM Control(s)
1		Electrostatic Precipitator
2		Electrostatic Precipitator
3	Low NOx Burner Technology w/ Closed-coupled OFA Selective Catalytic Reduction	Electrostatic Precipitator Baghouse

Emissions - Unit Level Data Report
Jul 24, 2014

Your query will return 1 Facility(s) and 3 Unit(s)

Program: Acid Rain Program (ARP)

Data Set: Emissions - Unit Level Data

Time Frame: Emissions :
Annual : 2009

Criteria: Facility Name/ID : Greenidge Generation LLC

Aggregate Criteria: No Aggregation (Unit Level)

Columns: State, Facility Name, Facility ID (ORISPL), Unit ID, Associated Stacks, Year, Program(s)

Record Number	State	Facility Name	Facility ID (ORISPL)	Unit ID	Associated Stacks	Year	Program(s)
1	NY	Greenidge Generation LLC	2527	4	CSG003	2009	ARP
2	NY	Greenidge Generation LLC	2527	5	CSG003	2009	ARP
3	NY	Greenidge Generation LLC	2527	6		2009	ARP

Columns: SO2 (tons), Avg. NOx Rate (lb/MMBtu), NOx (tons), CO2 (short tons), Heat Input (MMBtu), Operating Time, # of Months Reported

Record Number	SO2 (tons)	Avg. NOx Rate (lb/MMBtu)	NOx (tons)	CO2 (short tons)	Heat Input (MMBtu)	Operating Time	# of Months Reported
1	23.4	0.55	5.2	1,788.1	17,429	87	12
2	20.8	0.56	4.7	1,588.2	15,484	89	12
3	371.4	0.17	361.8	452,418.8	4,409,207	6,085	12

ENCLOSURE 1

Columns: Gross Load (MW-h), Steam Load (1000lb), EPA Region, County, Source Category, Owner, Operator

Record Number	Gross Load (MW-h)	Steam Load (1000lb)	EPA Region	County	Source Category	Owner	Operator
1		15,270	2	Yates	Electric Utility	AES Corporation	AES Corporation
2		14,777	2	Yates	Electric Utility	AES Corporation	AES Corporation
3	476,354		2	Yates	Electric Utility	AES Corporation	AES Corporation

Columns: SO2 Phase, NOx Phase, Operating Status, Unit Type, Fuel Type (Primary), Fuel Type (Secondary), SO2 Control(s)

Record Number	SO2 Phase	NOx Phase	Operating Status	Unit Type	Fuel Type (Primary)	Fuel Type (Secondary)	SO2 Control(s)
1	Phase 2	Phase II Group 1	Operating	Dry bottom wall-fired boiler	Coal	Residual Oil	
2	Phase 2	Phase II Group 1	Operating	Dry bottom wall-fired boiler	Coal	Residual Oil	
3	Table 1	Phase 1 Group 1	Operating	Tangentially-fired	Coal	Residual Oil	Dry Lime FGD

Columns: NOx Control(s), PM Control(s)

Record Number	NOx Control(s)	PM Control(s)
1		Electrostatic Precipitator
2		Electrostatic Precipitator
3	Low NOx Burner Technology w/ Closed-coupled OFA Selective Catalytic Reduction	Electrostatic Precipitator Baghouse

Emissions - Unit Level Data Report
Jul 24, 2014

Your query will return 1 Facility(s) and 3 Unit(s)

Program: Acid Rain Program (ARP)

Data Set: Emissions - Unit Level Data

Time Frame: Emissions :
Annual : 2010

Criteria: Facility Name/ID : Greenidge Generation LLC

Aggregate Criteria: No Aggregation (Unit Level)

Columns: State, Facility Name, Facility ID (ORISPL), Unit ID, Year, Associated Stacks, Program(s)

Record Number	State	Facility Name	Facility ID (ORISPL)	Unit ID	Year	Associated Stacks	Program(s)
1	NY	Greenidge Generation LLC	2527	4	2010	CSG003	ARP
2	NY	Greenidge Generation LLC	2527	5	2010	CSG003	ARP
3	NY	Greenidge Generation LLC	2527	6	2010		ARP

Columns: Operating Time, # of Months Reported, Gross Load (MW-h), Steam Load (1000lb), SO2 (tons), Avg. NOx Rate (lb/MMBtu), NOx (tons)

Record Number	Operating Time	# of Months Reported	Gross Load (MW-h)	Steam Load (1000lb)	SO2 (tons)	Avg. NOx Rate (lb/MMBtu)	NOx (tons)
1	0	6				0	
2	0	6				0	
3	8,303	12	605,629		448.9	0.2	561

ENCLOSURE 1

Columns: CO2 (short tons), Heat Input (MMBtu), EPA Region, County, Source Category, Owner, Operator

Record Number	CO2 (short tons)	Heat Input (MMBtu)	EPA Region	County	Source Category	Owner	Operator
1			2	Yates	Electric Utility	AES Corporation	AES Corporation
2			2	Yates	Electric Utility	AES Corporation	AES Corporation
3	599,104.7	5,838,307	2	Yates	Electric Utility	AES Corporation	AES Corporation

Columns: SO2 Phase, NOx Phase, Operating Status, Unit Type, Fuel Type (Primary), Fuel Type (Secondary), SO2 Control(s)

Record Number	SO2 Phase	NOx Phase	Operating Status	Unit Type	Fuel Type (Primary)	Fuel Type (Secondary)	SO2 Control(s)
1	Phase 2	Phase II Group 1	Operating	Dry bottom wall-fired boiler	Coal	Residual Oil	
2	Phase 2	Phase II Group 1	Operating	Dry bottom wall-fired boiler	Coal	Residual Oil	
3	Table 1	Phase 1 Group 1	Operating	Tangentially-fired	Coal	Residual Oil	Dry Lime FGD

Columns: NOx Control(s), PM Control(s)

Record Number	NOx Control(s)	PM Control(s)
1		Electrostatic Precipitator
2		Electrostatic Precipitator
3	Low NOx Burner Technology w/ Closed-coupled OFA Selective Catalytic Reduction	Electrostatic Precipitator Baghouse

Emissions - Unit Level Data Report
Jul 24, 2014

Your query will return 1 Facility(s) and 3 Unit(s)

Program: Acid Rain Program (ARP)

Data Set: Emissions - Unit Level Data

Time Frame: Emissions :
Annual : 2011

Criteria: Facility Name/ID : Greenidge Generation LLC

Aggregate Criteria: No Aggregation (Unit Level)

Columns: State, Facility Name, Facility ID (ORISPL), Unit ID, Year, Associated Stacks, Program(s)

Record Number	State	Facility Name	Facility ID (ORISPL)	Unit ID	Year	Associated Stacks	Program(s)
1	NY	Greenidge Generation LLC	2527	6	2011		ARP

Columns: Operating Time, # of Months Reported, Gross Load (MW-h), Steam Load (1000lb), SO2 (tons), Avg. NOx Rate (lb/MMBtu), NOx (tons)

Record Number	Operating Time	# of Months Reported	Gross Load (MW-h)	Steam Load (1000lb)	SO2 (tons)	Avg. NOx Rate (lb/MMBtu)	NOx (tons)
1	1,771	12	108,123		80.3	0.25	133.6

Columns: CO2 (short tons), Heat Input (MMBtu), EPA Region, County, Source Category, Owner, Operator

Record Number	CO2 (short tons)	Heat Input (MMBtu)	EPA Region	County	Source Category	Owner	Operator
1	113,357.5	1,104,780	2	Yates	Electric Utility	AES Corporation	AES Corporation

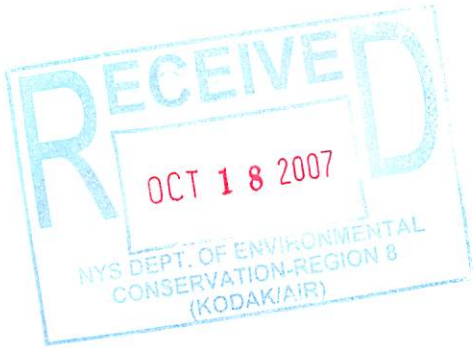
Columns: SO2 Phase, NOx Phase, Operating Status, Unit Type, Fuel Type (Primary), Fuel Type (Secondary), SO2 Control(s)

Record Number	SO2 Phase	NOx Phase	Operating Status	Unit Type	Fuel Type (Primary)	Fuel Type (Secondary)	SO2 Control(s)
1	Table 1	Phase 1 Group 1	Operating	Tangentially-fired	Coal	Residual Oil	Dry Lime FGD

Columns: NOx Control(s), PM Control(s)

Record Number	NOx Control(s)	PM Control(s)
1	Low NOx Burner Technology w/ Closed-coupled OFA Selective Catalytic Reduction	Electrostatic Precipitator Baghouse

ENCLOSURE 2



October 17, 2007

Mr. Thomas Marriott
RAPCE, Region 8
New York State Department of Environmental Conservation
6274 E. Avon-Lima Road
Avon, New York 14414-9519

Re: Greenidge Unit 4 MPC Project Status Update

Dear Tom:

We are writing to continue our coordination with the Department on the status of the Multi-Pollutant Control project being implemented at the AES Greenidge facility, Unit 4. As we have communicated to the Department, we have been working with our vendors and staff here at the plant to optimize the performance of the unit since the restart of the MPC-equipped unit in November, 2006.

By way of a short status summary regarding the emissions profile of Unit 4, the MPC equipment is performing to our expectations with respect to SO_2 emissions achieving an emissions rate of 0.19lbs/mmbtu or less across all loads above minimum. Acid gas and mercury removal has met project objectives. NOx reductions remain more complicated than has been the case for other parameters. The hybrid SNCR/SCR NOx control process is consistently able to achieve an emissions rate of 0.15 lbs/mmbtu at high loads. In addition, through our tuning efforts, we have been able to achieve the NOx reduction potential of the system at lower loads than was initially anticipated. Because the system has operated successfully at lower loads, annual NOx mass emissions reductions are expected to be consistent with project objectives. Despite our best efforts at optimizing the system for reductions, however, the unit is not able to achieve a 30 day rolling average NOx emissions rate of 0.10 lbs/mmbtu without damaging the combustion system. We have been working closely with our vendors, have expended countless hours and significant sums to improve performance and continue to do so. Mr. Franc Grabar was here last week and received a first-hand account of our efforts. A short summary of some of the activities and tuning we have undertaken to date is attached.

Unit 4 is one of the first commercial-scale hybrid SNCR/SCR retrofit applications. As we continue with our optimization efforts, and with an eye towards the various data we will be filing with the Department in 2008, we want to provide you and your colleagues with the opportunity to discuss our approach to NOx and the MPC Project as a whole and receive your input. This includes meeting with the AES MPC Project team at the facility if you deem that advisable. We of course remain interested in your views and suggestions.

AES Greenidge ▪ P.O. Box 187 ▪ Dresden, New York 14441 ▪ (315) 536-2359

If this is of interest to you, or if you would otherwise like to discuss the project in additional detail, please contact me at (315) 536-2359 ext 3228.

Sincerely,

for Douglas J. Roll

Douglas J. Roll
Plant Manager

cc: Michelle Crew, Esq. NYSDEC - Albany
Blaise Constantakes, Esq. NYSDEC - Albany
Mr. Franc Grabar NYSDEC – Region 8
Dewey & LeBoeuf, LLP

ENCLOSURE 2

November 21, 2007

Mr. Thomas Marriott
RAPCE, Region 8
New York State Department of Environmental Conservation
6274 E. Avon-Lima Road
Avon, New York 14414-9519

Re: AES Greenidge Unit 4 MPC Project

Dear Tom:

We are writing in follow up to our meeting of October 29, 2007 regarding the MPC project for Unit 4. As has been communicated to the Department on various occasions, AES has spent the past year on efforts to modify the MPC project to achieve the emission limits in the Consent Decree ("Good Faith Efforts"). In accordance with the Consent Decree, we will be providing a final report/submittal to the Department by February, 2008 which will include final proposed NOx emission rates, supporting materials, and other information for Greenidge Unit 4. In the interim, with this letter we are providing you with additional information regarding the Good Faith Efforts.

As we discussed during our October 29 meeting, we are providing a NOx emissions rate curve based on our Good Faith Efforts (Attachment 1). We are also attaching to this letter a copy of a power point which was used to facilitate our discussion during the meeting in which we further detailed our Good Faith Efforts. (Attachment 2). This attachment, which also contains the curve in Attachment 1, was sent to the Department (Mr. Grabar) electronically on October 29. For the convenience of the Department, we are re-sending these documents so you can have them under one transmittal letter. The power point/presentation, in addition to my letter dated October 17 (Attachment 3), and other communications with the Department, details the activities we have undertaken and the progress we have made in satisfaction of our Good Faith Efforts obligations including to achieve a NOx emission rate of 0.10 lb/mmBTU on a 30-Operating-Day Rolling Average since we commenced Initial Operation in November, 2006. As has been discussed with the Department, the Good Faith Efforts include installation of additional equipment, optimization, testing, and operational adjustments.

For these Good Faith efforts, we have expended in excess of $1,478,000 to achieve the NOx emission limit and to otherwise modify the NOx emission control systems identified in the Consent Decree. Because we have expended over $1,478,000 on the Good Faith Efforts, and the total capital cost of the MPC Project is $40,504,423, we have incurred capital expenditures in the aggregate in excess of 1% of the total capital cost of the MPC Project for Good Faith Efforts in accordance with pages 5, 12, and 13 of the Consent Decree. Attached (as Attachment 4), please find copies of invoices and other documentation of payments by AES for Good Faith Efforts expenditures. We will also be undertaking further, like expenditures, including completing

upgrades to the air system and additional lime storage capacity. These further expenditures are not included in the $1,478,000 calculation, and we expect them to total over approximately an additional $580,000. Attachment 5 contains copies of invoices and payments for the MPC project capital costs so the Department can see the total capital cost of the MPC Project -- $40,504,423.

As we discussed, the hybrid SNCR/SCR NOx control process is consistently able to achieve an emissions rate of 0.15 lbs/mmbtu for NOx at high loads. Despite our Good Faith Efforts to optimize the system for reductions, however, the unit is not able to achieve a 30-Operating-Day Rolling Average NOx emissions rate of 0.10 lbs/mmbtu. Nonetheless, because the NOx emissions control system has successfully operated at lower loads than anticipated, annual NOx mass emissions reductions are consistent with MPC project objectives.

As stated above, we will be preparing our final report/submittal, contemplated by the Consent Decree, to the Department which will include, among other things, NOx emission curves, a final proposed NOx emission rate and other supporting documentation. In the interim, we will continue to achieve a high load NOx emission rate between and including 0.10 and 0.15 lbs/mmbtu on a 30-Operating Day Rolling Average in accordance with the Consent Decree.

We look forward to continuing to work with the Department on the MPC Project and appreciate the time and efforts you and your colleagues have contributed to this process. Please feel free to contact me should you wish to discuss this matter further.

Sincerely,

Douglas J. Roll

Douglas J. Roll
Plant Manager

cc: Michelle Crew
Blaise Constantakes
Franc Grabar
Dewey & LeBoeuf, LLP

98366.3